A. STRAUSZ.

GAS REGULATOR.

No. 181,875. Patented Sept. 5, 1876.

Fig. 1

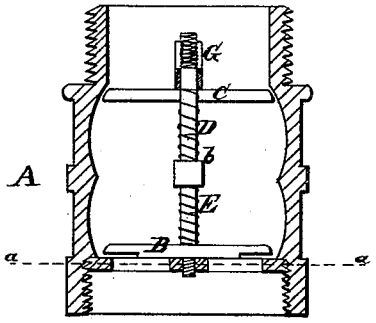
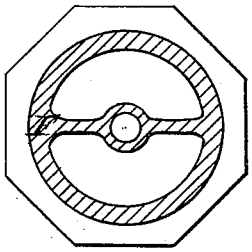


Fig 2



Witnesses
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UNITED STATES PATENT OFFICE.

ALEXANDER STRAUSZ, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN GAS-REGULATORS.

Specification forming part of Letters Patent No. **181,875**, dated September 5, 1876; application filed May 27, 1876.

To all whom it may concern:

Be it known that I, ALEXANDER STRAUSZ, of the city of Washington, District of Columbia, have invented certain Improvements in Gas-Regulators, of which the following is a specification:

My invention consists in the improvement on a system of valves to be used in combination with a case or valve-chamber of peculiar construction, for the purpose of regulating the flow of gas to a burner or a series of burners connected thereto, to reduce the tension or pressure of the gas to the said burner or burners, as hereinafter set forth.

In the accompanying drawing, forming a part of this specification, Figure 1 represents a vertical section of the invention and improvement. Fig. 2 is a section on line *a a* of Fig. 1.

In the drawing, A designates the casing or valve-chamber, the lower end of which is connected to the gas-supply. B is the lower valve, (embracing my improvement,) resting on valve-seat F, Fig. 2, screwed into the valve-chamber A. C is the upper valve; D and E, the spiral springs, and G the adjusting-nut, all of which are improvements on the instrument patented February 15, 1876, by J. P. Warner, of Baltimore, State of Maryland, and assigned to John R. Hall, of Philadelphia, State of Pennsylvania.

In operation, the drip or condensation of gas accumulates round the lower valve B, and on the valve-seat F, Fig. 2, thus preventing the valve B from lifting, and thereby obstructing the flow of gas into the chamber A. I improve the valve B by cutting slots for the purpose of letting the drip pass out of the chamber A, and consequently preventing the gumming of valve B on the valve-seat F, Fig. 2, and the obstruction to the flow of gas into the chamber A, which, in the old instrument, is caused by the gumming of valve B.

The upper valve C in the old instrument, as appears by practical experiments, never moves high enough to act as a further check to the flow of gas under an increased tension of the gas. I therefore place a spiral spring, D, under the upper valve C, and regulate the annular opening by means of the nut G, to allow sufficient gas to flow to the burner or burners under any pressure.

The spiral spring E, on top of the lower valve B, is for the purpose of keeping the valve B from trembling and moving too high in the valve-chamber, thereby preventing the jet from fluttering, and any more gas to enter the valve-chamber than is necessary for the consumption of gas for the number of burners lighted.

I am aware that gas-checks are used in combination with chambers and on valve-seats, the same being a common device; but in such arrangements the flow of gas fluctuates, and does not make the saving as regular as with my improvement; so I make no claim to such combination.

I claim—

1. The case A, the spiral springs D and E on spindle *b*, in combination with valves B and C, as described.

2. In a gas-regulator, the slotted valve B and springs D and E, all combined as and for the purpose as set forth.

ALEXANDER STRAUSZ.

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